

Hurricane Irma/Hurricane Maria 2017 9/21/2017 – 1030 EDT Update

EXECUTIVE SUMMARY

- USVI There are reports of widespread damage on St. Croix as a result of Hurricane Maria. EPA OSC on STX reports intermittent email and phone service. Very severe tree and power pole damage. The cargo section of the airport destroyed. Roads barely passable. Some are not. OSC performed an assessment of Limetree Bay terminals. They have no catastrophic damage. They did lose about a barrel of oil from the API into the west lagoon and they conducted a cleanup on 9/20. The tanks and lines held although they are some dents and dings. The terminal has no requests for assistance at this time. Initial assessments are ongoing.
- PR The storm made landfall at Yabucoa in Puerto Rico's southeast shortly after 6 a.m. 9/20 with winds as strong as 155 m.p.h. It had crossed the United States Virgin Islands as a Category 5 storm, then weakened to a Category 4 storm as it passed over PR. The eye of the hurricane left Puerto Rico at noon between the coast of the municipalities of Barceloneta and Arecibo. Power is out throughout the island. Initial assessments are ongoing. The Governor said: "Our island is destroyed."
- On 9/20, The President has signed a Disaster Declaration FEMA-4340-DR for the Territory of the U.S. Virgin Islands for Hurricane Maria.
- FEMA is designating Hurricane Maria operations a Level 1 incident. On 9/20 at 8am, FEMA transitioned incident support duties from the Regional Response Coordination Staff (RRCS) to the National Response Coordination Staff (NRCS). To support this transition, R2 incident support responsibilities shifted from the Regional Response Coordination Center (RRCC) to National Response Coordination Center (NRCC).
- EPA Region 2 sent RRCC ESF #10 staff to EPA HQ on 9/19 to assist the EPA ESF #10 desk in the FEMA NRCC in Washington D.C.
- EPA USVI/PR response personnel are re-positioned on the U.S. mainland. The exceptions are: an EPA Rep is in St. Croix at the FEMA Bunker with the IOF staff and FEMA IMAT leadership. EPA CEPD personnel and responders sheltered in place in the USVI and PR. The Region is communicating with CEPD leadership and the OSCs on St. Croix, USVI and PR.
- Satellite communications have been strategically placed with personnel remaining in the U.S. Caribbean. We have developed a communications plan and communications schedule with the employees left in PR and USVI. We are continuing to conduct

communication checks and status/ground condition updates with personnel in the USVI and PR.

- **EPA's Re-Deployment to PR/USVI**. FEMA flights will be available from Atlanta back to PR/USVI after Maria passes (estimated Friday-Monday). EPA will have personnel on the following two opportunities.
 - O Six seats reserved for two teams of three responders who will go and assess priority drinking water and waste water facilities in the USVI. Priorities will include those servicing hospitals and sensitive populations. This group would leave 24 hours after the storm passes. Flight expected to leave on 9/22.
 - O Twenty seats are reserved for EPA responders to return to the USVI. Flight expected to leave on 9/23 or 48 hours after storm passing.
- All flight times and where they arrive (USVI or PR) will depend on the condition of airports post-Maria. Lodging has also been requested through FEMA once responders arrive in the USVI or PR.
- Other Significant Concurrent Events.
 - o 72nd United Nations General Assembly is in session from 9/12-25/2017.
 - We continue to monitor the track of Hurricane Jose, which is expected to remain well offshore as it moves north along the eastern US coastline.
 - We continue to monitor the northern track of Hurricane Maria for potential impacts/interaction with Hurricane Jose on the East Coast.

PUERTO RICO / U.S. VIRGIN ISLANDS CONDITIONS

US Virgin Islands (USVI):

- No deaths reported at this time.
- State of Emergency declared; National Guard activated.
- Power Outages: Unknown
- Public schools remain closed
- Curfew remains in effect from 6pm to 6am until 9/23
- St. Thomas and St. Croix Airports closed until 9/21.

- Public transit not operational in St. Thomas and St. John
- Ferry service between St. Thomas and St. John suspended
- Existing damage to roads in St. Croix and St. John from Irma; Assessments and debris removal to resume weather permitting

Puerto Rico (PR):

- No deaths reported at this time
- State of Emergency remains in effect; National Guard activated.
- Airports: 6 are closed and 4 are opened. San Juan Airport closed
- Ferry service, heavy rail, and bus transit suspended until further notice
- Power Outages: There are reports of 100% outage. Two of PREPA's major transmission lines -one of 230,000 volts and other of 115,000 volts- are down
- Curfew in effect from 6pm to 6am.
- Hurricane Maria broke two National Weather Service radars on the island.
- Several major highways and streets blocked by fallen trees and light posts and poles.
- PRASA's office building was severely impacted (major damages).
- 80% of the Juanamatos EJ community in Cataño completely destroyed.
- The following municipalities already reported major floods and destruction: Loíza, Canóvanas, Río Grande and Toa Baja.

PUBLIC AFFAIRS

The PIO is Elias Rodriguez, who can be reached at 212-637-3664. The Assistant PIO through September 21 is Emily Bender. She can be reached at 617-918-1037. All press inquiries are being managed through the Office of Public Affairs.

The Office of Public Affairs issued a news release "EPA Hurricane Maria Preparation, Irma Recovery Update for September 20, 2017". We continue to provide all Region 2 staff with relevant Irma / Maria news clips and EPA news releases. Beginning September 21, the Office of Public Affairs will issue separate Harvey, Irma and Maria response news releases. Region 2 PAD will draft the Maria response news release for OPA.

The response web site at www.epa.gov/hurricane-irma is now being managed primarily Region 4. The response web site www.epa.gov/hurricane-maria is now live, with content being created and posted by the HQ EOC and Region 2 PIO and others in the REOC. We continue to coordinate with ERT and Region 4 on an Irma story map.

Community Involvement: The PIO and PAD management have identified PIOs, Community Involvement Coordinators and community relations support for the REOC, Caribbean EOC(s) and USVI and Puerto Rico assessment and cleanup teams. Resource requests for these personnel are being processed and will be ready when we get the green light for deployment.

Region 2 – Hurricane Irma Management Objectives

- Protect the health and safety of EPA employees during re-deployment to VI and PR in the aftermath of Hurricane Maria.
- Implement a re-position plan to address communications schedules, employee location information, rallying points, and a cellular and satellite communication plan.
- Coordinate with FEMA on the re-position and remobilization of EPA responders.
- Implement a re-mobilization plan.
- Minimize social, political, and economic adverse impacts.
- Maintain communication and briefing schedule with R2 senior executives and EPA Headquarters. Support a consistent communications approach agency-wide, enabling EPA to act and speak in unison during these incidents.
- Provide situation reports and other information on schedule provided by RIC.
- Provide guidance for length of work day and deployments as it pertains to this specific event
- Coordinate logistics with deployed personnel to provide transportation options, lodging, security, ground transportation on site.
- Identify clearly defined roles for both Regions and Headquarters.
- Identify long-term recovery objectives the Agency may be requested to support, and determine resources needed to support/sustain those requests to accomplish the objectives.

Once re-deployed teams are on the ground in PR and the USVI:

- Secure all NPL and removal sites. Regulated facilities and Superfund and oil sites will be surveyed prior to storm fall if a land impact is expected
- Identify vulnerabilities at regulated facilities
- Address any immediate hazardous substance releases or oil spills resulting from the storm's impact
- Assist state and local agencies in ensuring safety of drinking water systems.
- Monitor air quality when/if necessary in response to conditions on the ground.
- Provide guidance for length of work day and deployments as it pertains to this specific event
- Coordinate logistics with deployed personnel to provide transportation options, lodging, security, ground transportation on site;
- Coordinate national resources to assist the Region;
- Identify clearly defined roles for both Regions and Headquarters;

- The response will use the Region's incident specific Data Management Plan (DMP);
- In collecting, sharing, and analyzing environmental data, EPA will give primacy to data with potential human health consequences;
- EPA will work to ensure that its decision-makers have access to the data and expertise they need to make decisions based on sound science.

DEBRIS RECOVERY

No activities to report.

AIR MONITORING

No air monitoring activities.

EMERGENCY RESPONSE

Daily/Cumulative Summary of Hazard Evaluations/Recovery								
Status	Орс	ened	Closed					
	9/20/2017	Cumulative	9/20/2017	Cumulative				
Puerto Rico	0	0	0	0				
U.S. Virgin Islands	0	2	0	2				

Note: Open means that the target is yet to be recovered. Closed means the target was recovered, left in place, or access was denied to collect the item. The facilities on the USVI are associated with the request for mold assessment of the STT airport tower and the current oil spill at Total.

Daily/Cumulative Summary of Spills/Discharges								
Status	Op	ened	Closed					
	9/20/2017	Cumulative	9/20/2017	Cumulative				
Puerto Rico	0	3	0	3				
U.S. Virgin Islands	0	1	0	1				

SUPERFUND NPL, SUPERFUND REMOVAL, AND OIL REMOVAL SITES

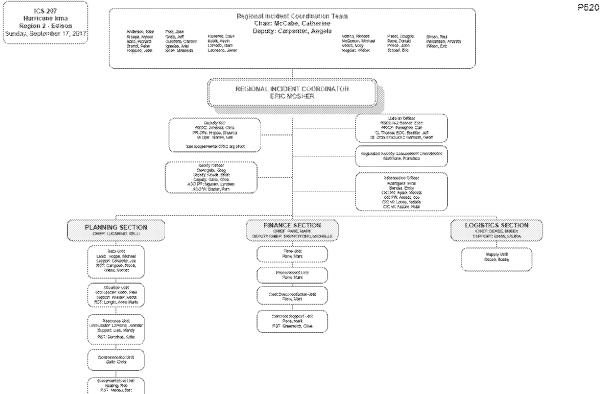
Preparations are underway to re-assess Superfund and oil sites in PR and the USVI as part of the Region's re-deployment plan. Re-assessment planning/implementation is on-going.

		SUPERFUND SIT	TES (NPL, Removal and	Oil)		
		P	UERTO RICO			
Site	Туре	Phase 1	Phase 2		Phase 3	All Phases Completed
		Post-Storm Assessment	Site Inspection Needed	Inspected	Additional Re	esponse Action
Atlantic Fleet Weapons	NPL					
Juncos Landfill	NPL					

Upjohn Facility	NPL								
Arecibo Battery Recycling	Removal &								
Corp.	NPL*								
Corozal Battery	Removal &								
	NPL*								
Cabo Rojo Groundwater	NPL								
Cidra Groundwater	NPL								
Dorado Groundwater	NPL								
Fibers Public Supply Wells	NPL								
Hormigas Groundwater	NPL								
Maunabo Urbano Public	NPL								
Wells									
Papelera Puertoriquena,	NPL								
Inc.									
Pesticide Warehouse 1	NPL								
Pesticide Warehouse III	NPL								
San German Groundwater	NPL								
Scorpio Recycling	NPL								
Vega Alta Public Supply	NPL								
Wells									
Vega Baja Solid Waste	NPL								
Disposal									
Guayanilla Bay Oil Spill	Oil								
	Response	 							
Puma Caribe (CAPECO)	Oil								
	Response	 							
		U	.S. VIR	GIN ISLA	NDS				
TUTU Well Field	NPL								
Krum Bay Oil Spill at	Oil								
WAPA Facility	Response	 							
Cruz Bay Oil Tank	Oil								
	Response								

^{*} These are Sites that have both, a Removal and Remedial program action. Only one assessment will be conducted per Site.

REGION 2 RESPONSE ORGANIZATION (ICS 207)



FIELD RESPONSE ACTIVITIES

PUERTO RICO

- Teams are preparing to re-deploy to Puerto Rico in accordance with our EPA Region 2 Mobilization and Resource Plan.
- Hazardous Material Assessment Team and Critical Water Assessment Team scheduled to be airlifted to PR 9/22

U.S. VIRGIN ISLANDS

- Teams are preparing to re-deploy to the USVI in accordance with our EPA Region 2 Mobilization and Resource Plan.
- St. Croix: Numerous gas stations destroyed, leading to potential environmental concerns; physical assessment by EPA required to assess possible impacts. EPA reporting concerns of spilled diesel fuel trucks, heavily damaged cruise ship, and damage at propane depot pier

REGION 2 REGIONAL EMERGENCY OPERATIONS CENTER (REOC)

- Assisted PR Department of Natural and Environmental Resources (DNER) preparing draft RRF to request EPA direct assistance to address the hazmat and oil mission once Hurricane Maria passes. EPA will assist DNER with the processing of the RRF.
- Re-deployment/mobilization plan is being implemented for EPA response personnel and resources.
- FEMA flights are available from Atlanta to PR/VI (estimated Friday-Monday). For the near-term, EPA will deploy personnel as follows:
 - O Six seats reserved for two teams of three responders who will go and assess priority drinking water and waste water facilities in the USVI. Priorities will include those servicing hospitals and sensitive populations. This group would leave 24 hours after the storm passes. Flight expected to leave on 9/22,
 - O Twenty seats are reserved for EPA responders to return to the USVI. Flight expected to leave on 9/23 or 48 hours after storm passing.
- All flights and where they arrive (USVI or PR) will depend on the condition of airports post-Maria. Lodging has also been requested through FEMA once responders arrive in the USVI or PR.

The table below displays the teams that have been deployed based on the assessment results in Puerto Rico or the USVI.

Quantity and Types of Teams Deployed 9/20/2017							
Team Type	Puerto Rico	U.S. Virgin Islands					
Assessment Team – All							
Missions	0	0					
Water Assessment	0	0					
Hazard Evaluation	0	0					
Oil Discharge Assessment	0	0					
Container Recovery	0	0					
Oil Recovery	0	0					
ER/Recovery	0	0					
Air Operations	0	0					
Contaminated Debris	0	0					
Operation Centers (REOC),	1 (PR IOF)	1 (STX VITEMA/FEMA					
PREOC, VITEMA, PR IOF,		Bunker)					
VI IOF							

PUERTO RICO

		TOTAL		
	Drums (55 Gals)	Large Containers (<55 gals)	Large Containers (>55 gals)	
9/20/2017	0	0	0	0
Total to Date	0	0	0	0

U.S. VIRGIN ISLANDS

		TOTAL		
	Drums (55 Gals)	Large Containers (<55 gals)	Large Containers (>55 gals)	
9/20/2017	0	0	0	0
Total to Date	0	0	0	0

AGENCY COORDINATION

FEMA designated Hurricane Maria operations a Level 1 Incident. On 9/20 at 8AM, FEMA transitioned incident support responsibilities from the Regional Response Coordination Staff (RRCS) to the National Response Coordination Staff (NRCS). The NRCS will now direct and support the deployed National Incident Management Assistance Team (IMAT) and the Unified Coordination Group (UCO). This process will help to facilitate the movement of regional personnel into their assigned incident management positions as quickly as possible to meet incident needs following a Level 1 incident.

To support this transition, incident support responsibilities shifted from the Regional Response Coordination Center (RRCC) to the National Response Coordination Center (NRCC). The RRCC stood down on 9/20. Region 2 sent one rep to staff the RRCC ESF-10 desk in the FEMA NRCC in Washington D.C.

EPA has an OSC in the VITEMA/FEMA EOC bunker in St. Croix.

Two vessels, both named Paragon, are adrift near USVI; three tug vessels remain in the area monitoring the status

PR: Buckeye Partners requesting clearance from Port Authority to fly a strike team into PR to conduct damage evaluations of Yabucoa Buckeye Global Marine Terminal hazardous materials facility; facility stores up to 4.6 million barrels of petroleum and 25% of the gasoline and diesel for the island

When air traffic resumes post-storm, USCG will re-deploy eight National Strike Force (NSF) personnel and 18-foot shallow water boat from Clearwater, FL, and eight additional NSF personnel from PR to St. Thomas and St. Croix to resume ESF-10 activities

SPILL/RELEASE RESPONSE

Hotline Calls as of September 20, 2017						
Number of Irma Related Calls Received During Reporting Period 1300-0100	0					
Total Number of Irma Related Calls to Date	5					
* EPA is assessing each call through the NRC to determine appropriate response and						

^{*} EPA is assessing each call through the NRC to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as

DRINKING WATER / WASTEWATER

No new Information to report

REGULATED FACILITIES

The Regulated Facility Team (RFT) has temporarily suspended monitoring regulated facilities. All RMP, SPCC, and FRP facilities have responded to the post-Irma questionnaire, and as such the RFT will focus on regulated facilities impacted by Hurricane Maria.

In preparation for Hurricane Maria, the RFT sent a pre-storm assessment email on 9/18 to 197 RMP, FRP, and SPCC facilities in PR and the USVI. This pre-storm email: 1) reminded facilities to implement storm preparation procedures, 2) provided technical information regarding spill and release reporting, and 3) asked potentially compromised facilities to identify themselves for facility-specific compliance assistance.

The Regulated Facility Assessment Coordinator (RFAC) has discussed pre-storm and poststorm assessment activities with other Region 2 inspection programs, including UST, Federal Facilities, RCRA, and NPDES.

The RFT is prepared to conduct facility assessment work in the USVI and PR in the aftermath of Hurricane Maria.

PUERTO RICO

Facility Type	Sites Identified	Pre-Storm Remote Assessment	Post Storm Remote Assessment	Post Storm Field Assessment	Follow-up Action Required
RMP	56	56*	0	0	0
FRP	22	22*	0	0	0
SPCC (non- FRP) ^µ	232#	232#*	0	0	0

	Total	310#	310#	0	0	0	
3		1	3		}	1	

U.S. VIRGIN ISLANDS

Facility Type	Sites Identified	Pre-Storm Assessment	Post Storm Assessment	Post Storm Field Assessment	Follow-up Action Required
RMP	1	1*	0	0	0
FRP	6	6*	0	0	0
SPCC (non- FRP) ^µ	57#	57#*	0	0	3
Total	64#	64#	0	0	3

EPA RESOURCES

The following chart shows deployments that were repositioned *prior to* Hurricane Maria. As of 9/19 all EPA and contractor responders in the Caribbean have been repositioned to the Mainland US, except for one OSC remaining in the St. Croix, USVI FEMA bunker, one EPA employee who resides in St. Thomas, USVI and is sheltering in place, two OSCs who reside on Puerto Rico and are sheltering in-place, and one CIC who is visiting family on PR.

Personnel	EPA Edison, NJ NYC San Juan, PR^	FEMA RRCC Colts Neck, NJ	Puerto Rico Deployments*	USVI Deployments*	Totals
EPA	58	1	4	2	65
START/ RST	8	0	2	0	8
ERRS	6	0	0	0	6
Other Contractors	0	0	0	0	0
Totals	72	2	5	2	79

^{*}One person on STT and one person on STX.

DECLARATIONS FOR HURRICANE IRMA

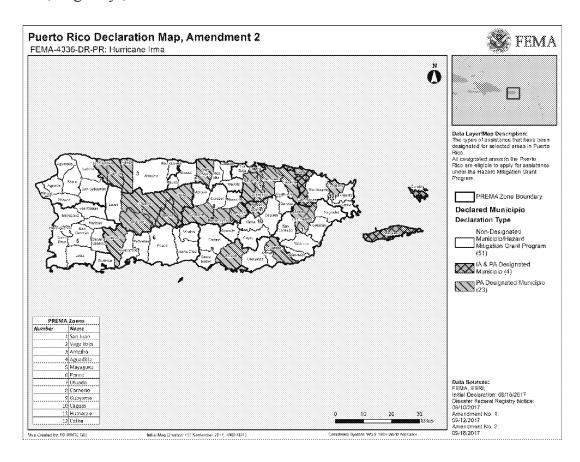
Puerto Rico.

[^]Number includes personnel in the REOC, RICT, and CEPD personnel that are working the response.

Emergency Declaration FEMA-3384-EM effective September 5. Assistance is for all 78 municipalities in the Commonwealth of PR. The Governor of Puerto Rico requested a disaster declaration 9/8.

Disaster Declaration FEMA-4336-DR effective September 9. Declared areas only include Culebra and Vieques. On 9/13 ten additional municipalities in Puerto Rico were added to the major declaration, and are now eligible for work under any DFA MA's that we receive. The municipalities are: Adjuntas, Canovanas, Carolina, Guaynabo, Juncos, Loiza, Luquillo, Orocovis, Patillas, and Utuado.

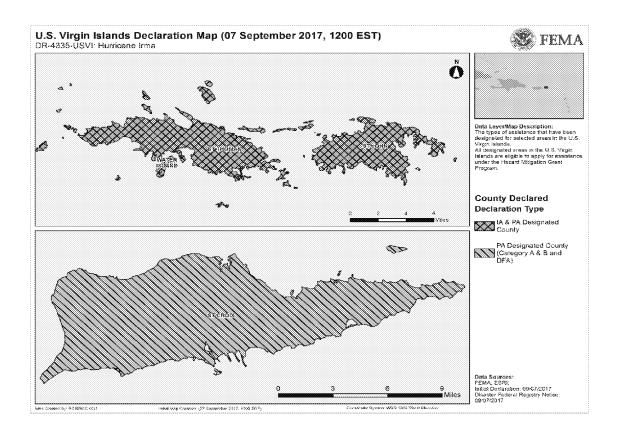
On 9/15, fifteen additional municipalities were added to the major declaration and are now eligible for Public Assistance. The municipalities are: Aguas Buenas, Barranquitas, Bayamón, Camuy, Cataño, Ciales, Comerío, Hatillo, Jayuya, Las Piedras, Quebradillas, Salinas, San Juan, Vega Baja, and Yauco.



U.S. Virgin Islands.

Disaster Declaration FEMA-4335-DR effective September 7, 2017. St. Thomas and St. John approved for Individual Assistance, all islands eligible for Public Assistance and the Hazard Mitigation Grant Program.

Emergency Declaration FEMA-3383-EM effective September 5. Assistance is for all islands in the Territory of the USVI.



DECLARATIONS FOR HURRICANE MARIA

Puerto Rico.

Emergency Declaration. The President has signed Emergency Declaration FEMA-3391-EM for Puerto Rico.

U.S. Virgin Islands.

Emergency Declaration. The President has signed Emergency Declaration FEMA-3390-EM for the Territory of the U.S. Virgin Islands for Hurricane Maria.

On 9/20, The President has signed a Disaster Declaration FEMA-4340-DR for the Territory of the U.S. Virgin Islands for Hurricane Maria.

FUNDING FOR IRMA AND INITIAL FUNDING FOR MARIA

Mission Assignment Number	Purpose	Start Date	End Date	Total Amount	Indirect Costs	Amt. Available	Daily Burn Rate	Used	Balance
VI- 17090102- EPA-01	EPA to FEMA R2 RRCC (Colts Neck, NJ)	9/2/17	9/11/17	\$10,000	\$1,046	\$8,954	\$0	\$8,954	\$0
4335DR-VI- EPA-01	EPA to FEMA R2 RRCC (Colts Neck, NJ) and	9/7/17	10/7/17	\$100,000	\$10,466	\$89,534	\$1,200	\$23,196	\$66,338

	FEMA NRCC (Washington, DC)								
3383EM-VI- EPA-01	EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA & NRA Teams and other coordination venues	9/7/17	9/16/17	\$75,000	\$7,850	\$67,150	\$0	\$67,200	\$0
4335DR-VI- EPA-02	Assess oil & hazmat releases, contaminated debris & other environmental events in VI	9/7/17	9/30/17	\$508,000	\$53,170	\$454,830	\$35,000	\$345,600	\$109,230
4335DR-VI- EPA-04	Removal, cleanup and disposal of oil & hazmat; collect and dispose of HHW; monitor immediate threats to public H&S and the environment in the VI	9/13/17	10/13/17	\$10,000,000	\$1,046,646	\$8,953,354	\$0	\$0	\$8,953,354
4335DR-VI- EPA-06	EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA & NRA Teams and other coordination venues	9/2/17	10/13/17	\$2,000,000	\$209,329	\$1,790,671	\$19,200	\$416,000	\$1,374,671
PR- 17090102- EPA-01	EPA to FEMA R2 RRC and other coordination venues as necessary	9/1/17	9/11/17	\$20,000	\$2,093	\$17,907	-	\$17,907	\$0
3384EM-PR- EPA-01	EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA and NRA Teams and other coordination venues	9/6/17	9/16/17	\$75,000	\$7,850	\$67,150	\$12,000	\$64,800	\$2,350
3384EM-PR- EPA-03	Assess oil & hazmat releases, contaminated debris & other environmental events in PR	9/9/17	9/30/17	\$508,000	\$53,170	\$454,830	\$12,000	\$139,200	\$315,630
4336DR-PR- EPA-01	EPA to FEMA RRCC. Funding for EPA	9/10/17	10/10/17	\$100,000	\$10,466	\$89,534	\$12,000	\$58,800	\$30,734

cent	mand ters is orized.						
	•		Grand Total	\$11,993,914	N/A	\$1,141,657	\$10,852,307

Note regarding MA 4335DR-VI-EPA-06: \$50,000 was allocated to the USEPA HQ EOC, from MA 4335DR-VI-EPA-06, to supplement costs incurred during the Hurricane Irma response.

FUEL WAIVERS

Fuel waivers are not needed for PR or USVI.

LONG RANGE PLANNING

- National Disaster Recovery Framework (NDRF) Activities. FEMA has begun long range recovery planning and is in contact with the EPA Office of the Administrator's (OA) disaster recovery coordinator. The Acting Regional Administrator is Region 2's Federal Disaster Recovery Coordinator with CASD providing support. CASD is in communication with the OA and is working with CEPD and the other divisions to identify Region 2 contacts for the six Recovery Support Function (RSF) areas: 1.) Community Planning and Capacity Building, 2.) Economic Recovery, 3.) Health and Social Services, 4.) Housing Recovery, 5.) Infrastructure Systems, and 6.) Natural and Cultural Resources. This work will assist the Agency to identify potential recovery challenges and plan for resiliency. EPA Region 2 disaster response and recovery personnel are coordinating and will share our Irma data collection and results of our assessment efforts.
- Hurricane Maria. On 9/21 at 0500 hrs, the large eye of Hurricane Maria was located about 70 miles north of Punta Cana, Dominican Republic. Maria is moving toward the NW near 9 mph and this general motion is expected through tonight. A turn toward the N-NW is forecast on Friday. On the forecast track, the eye of Hurricane Maria will continue to pass offshore of the NE coast of the Dominican Republic today. Maria should then move near the Turks and Caicos Islands and the SE Bahamas tonight and Friday. Maximum sustained winds are near 115 mph with higher gusts. Maria is a category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some strengthening is possible during the next day or so. Hurricane-force winds extend outward up to 60 miles from the center and tropical-storm-force winds extend outward up to 150 miles. Punta Cana in the eastern Dominican Republic recently reported a wind gust to 56 mph.

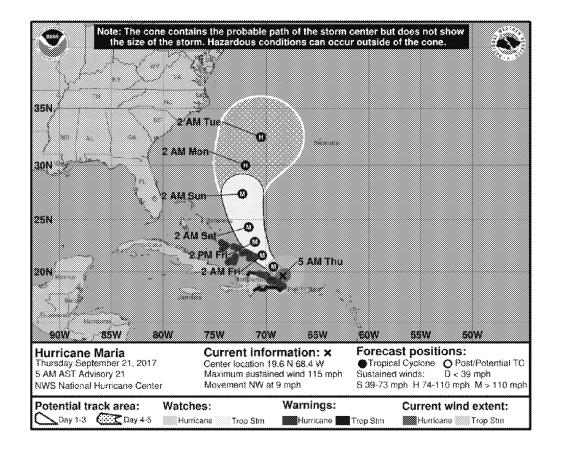
WIND: Strong gusty winds are still occurring over portions of Puerto Rico, but should continue to gradually subside this morning.

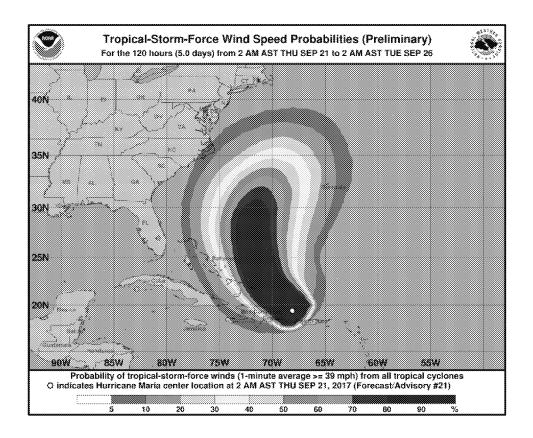
STORM SURGE: Water levels in Puerto Rico should continue receding during the next few hours.

RAINFALL: Maria is expected to produce the following rainfall accumulations through Saturday: Puerto Rico...additional 4 to 8 inches, isolated maximum storm total amounts 35 inches. U.S. and British Virgin Islands...additional 2 to 4 inches. Rainfall

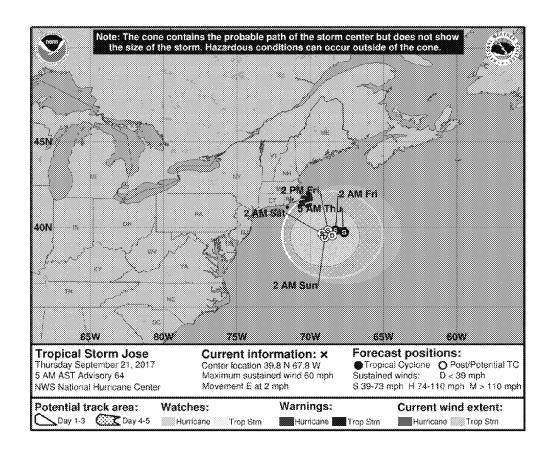
on these islands will continue to cause life-threatening flash floods and mudslides.

SURF: Swells generated by Maria are still affecting the Leeward Islands, Puerto Rico, and the Virgin Islands. These swells are likely to cause life-threatening surf and rip current conditions.





• Tropical Storm Jose. On 9/21 at 0500 hrs, the center of TS Jose was located about 150 miles SE of Nantucket, MA. Jose is moving toward the east near 2 mph. Jose is expected to meander off the coast of SE New England for the next several days Maximum sustained winds are near 60 mph with higher gusts. Gradual weakening is forecast during the next 48 hours. Jose is forecast to become post-tropical by Friday. Tropical-storm-force winds extend outward up to 230 miles from the center. A gust to 48 mph was recently reported at the Nantucket Airport.



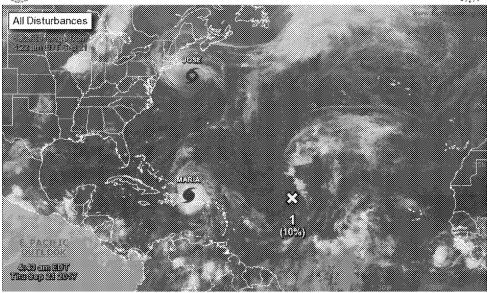
- Additional Threats to U.S. Caribbean.
 - No additional threats expected
- Future Weather Outlook.



Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Current Disturbances and Two-Day Cyclone Formation Chance: S < 40% S 40-60% ★ > 60% Tropical or Sub-Tropical Cyclone: O Depression S Storm # Hurricane ⊗ Post-Tropical Cyclone × Remnants



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



